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# M-SERIES BACK PRESSURE VALVES



**Griffco's** new molded Noryl top extends the temperature and pressure rating of the standard valves. New valve designs continue to enhance the performance of chemical feed systems by applying a continuous back pressure to the chemical feed pump, while also acting as an anti-siphon valve. New construction ensures increased reliability in the rigorous service of municipal and industrial applications. Wetted materials include: **PVC, CPVC, PP, PVDF, PTFE, 316 SS, A 20 and Hast. C.** Available sizes: 1/4", 3/8", & 1/2".

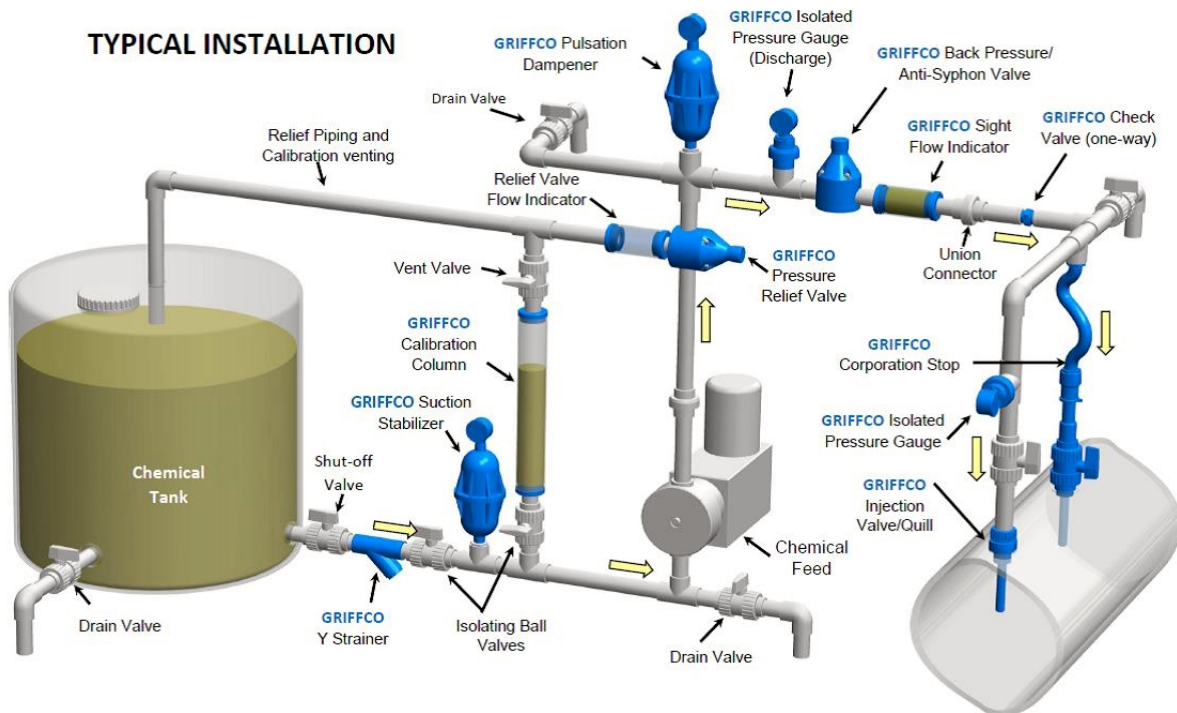
## Features:

- Molded Noryl Top
- High Reliability / Low Cost
- Compact Size for OEM Applications
- Adjustable Pressure Settings
- Optional 350 PSI Rated Valve
- Anti-Siphon Function
- Robust, Machined Body Construction
- Vulcanised PTFE/EPDM Diaphragm
- Wide Range of Materials

## Operation:

**Griffco** diaphragm back pressure valves apply positive discharge pressure to a metering pump system to prevent siphoning and eliminate varying dosage rates caused by fluctuating downstream pressure. The diaphragm is held against the valve seat by an internal spring. When the preset pressure is exceeded, the diaphragm is forced up and chemical flows through the valve to the injection point. The valves are preset for 50 psi, however they are field adjustable from 10 - 150 psi via the adjustment screw. Installation should be as close to the injection point as possible to prevent chemical line drainage, and it is most important that all chemical system equipment such as pulsation dampeners and pressure gauges are between the pump and back pressure valve.

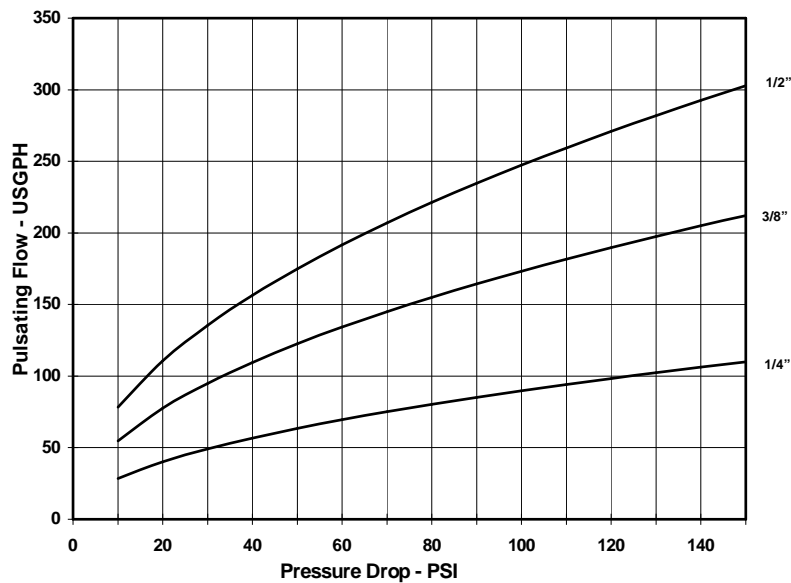
## TYPICAL INSTALLATION



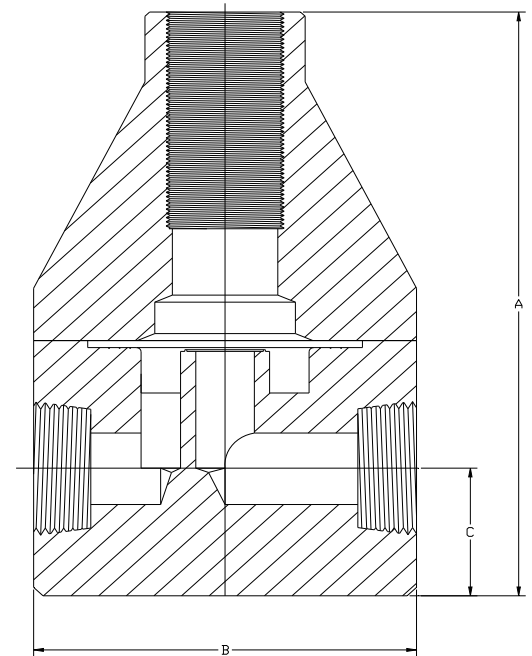
## Technical Data:

<b>Sizes:</b> <b>Model BPM</b>		1/4", 3/8", 1/2"			
<b>Connections:</b>		NPT, Socket, Union, Flanged			
<b>Pressure Adjustment</b>		Standard: 10 - 150 psi, Optional: 0 - 50 psi, 10 - 250 psi, 50 - 350 psi			
<b>Flow Rates @ 150 psi</b>		<b>Shipping Weight: lbs</b>			
<b>Size</b>	<b>Pulsating</b>	<b>Continuous</b>	<b>Plastic</b>	<b>Metal / Plastic Top</b>	<b>Metal / Metal Top</b>
1/4"	100 USgph	5 USgpm	1.0	2.5	3.0
3/8"	200 USgph	10 USgpm	1.0	2.5	3.0
1/2"	300 USgph	15 USgpm	1.0	3.0	3.5
<b>Max Temperature: (°F)</b>		PVC: 140°; CPVC & PP: 195°; PTFE & PVDF & Metal: 300°, (Peak 390°)			
<b>Max Operating Pressure @ 70°F: (psi)</b>		Plastic/Noryl: 375 psi, Metal /Metal: 2000 psi			
<b>Materials of Construction:</b>					
<b>Diaphragm</b>		PTFE / EPDM, Optional: Viton, Hypalon, Nitrile, PTFE / Viton			
<b>Valve Top</b>		Standard: Noryl, Optional: 316 SS L			
<b>Valve Body</b>		PVC, CPVC, PP, PTFE, PVDF, 316 SS L, A 20, Hast. C, Others on Request			

## Performance Curves:



## Dimensions:



## Product Codes For Ordering:

BPM

1      2      3      4

### 1 = Size

025 - 1/4"  
038 - 3/8"  
050 - 1/2"

### 2 = Material

P - PVC  
CP - CPVC  
PP - Polypro  
T - PTFE  
K - PVDF  
H - Halar  
S - 316 SS  
A - Alloy 20  
C - Hastelloy C

### 3 = Spring Opt

Blank - 10-150 psi  
1 - 0 - 50 psi  
2 - 10 - 250 psi  
  
*For 50 - 350 psi  
spring use option  
code "MSS"*

### 4 = Options

Blank - NPT & PTFE/EPDM  
V - Viton Diaphragm  
TV - PTFE/Viton Diaph.  
S - Socket Connection  
F - Flange Connection  
U - Union Connection  
OSS - 316 SS L Top  
MSS - 50-350 psi 316SSL Top  
AR - Priming Valve  
90 - 90° Configuration

DIMENSIONS: BPM - Series			
All Materials		(Orifice size = 0.312)	
Size	A (in.)	B (in.)	C (in.)
1/4"	3.550	2.350	0.750
3/8"	3.550	2.350	0.750
1/2"	4.250	2.350	1.080

Note: Option MSS is only for use on 316SS, A20, & Hast C Valves.